

In the Claims

Please amend the claims as follows:

1. (Previously presented) A recombinant double stranded RNA phage (rdsRP) encoding a double stranded RNA eukaryotic expression cassette for expression in eukaryotic cells, the rdsRP comprising:

at least one segment of a double stranded RNA phage (dsRP) and an internal ribosome entry site (IRES) nucleotide sequence incorporated into the at least one segment of the dsRP.

2. (Previously presented) The rdsRP according to claim 1, further comprising at least one passenger gene sequence incorporated into the at least one segment of the dsRP.

3. (Previously presented) The rdsRP according to claim 1, wherein the IRES is inserted into at least one of three dsRNA segments of the dsRP.

4. (Previously presented) The rdsRP according to claim 2, wherein the passenger gene and the IRES are functionally linked.

5. (Previously presented) The rdsRP according to claim 3, wherein the segment of dsRP include segment L, segment M or segment S.

6. (Previously presented) The rdsRP according to claim 1, further comprising an alpha virus expression cassette.

7. (Previously presented) The rdsRP according to claim 2, wherein the passenger gene encodes for an immunogen.

8. (Previously presented) The rdsRP according to claim 1, wherein the dsRP is Phi-6, Phi-8, or Phi-13.

9. (Previously presented) The rdsRP according to claim 2, wherein the rdsRP is expressed and amplified in a bacterial host strain.

10. (Previously presented) The rdsRP according to claim 7, wherein the rdsRP further encodes for an adjuvant as an additional passenger gene.
11. (Previously presented) The rdsRP according to claim 7, wherein the rdsRP further encodes for a cytokine.
12. (Previously presented) The rdsRP according to claim 7, wherein the immunogen is foreign or endogenous.
13. (Previously presented) The rdsRP according to claim 12, wherein the immunogen is foreign and is a member selected from the group consisting of viral proteins, bacterial proteins, parasite proteins, cytokines, chemokines, immunoregulatory agents, and therapeutic agents.
14. (Previously presented) The rdsRP according to claim 13, wherein the immunogen originates from a viral pathogen, bacterial pathogen, or parasitic pathogens.
15. (Previously presented) The rdsRP according to claim 14, wherein the immunogen originates from a viral pathogen comprising a member selected from the group consisting of Orthomyxoviruses, Retroviruses, Herpesviruses, Lentiviruses, Rhabdoviruses, Picornoviruses, Poxviruses, Rotavirus and Parvoviruses.
16. (Previously presented) The rdsRP according to claim 13, wherein the viral protein is a member selected from the group consisting of: human immunodeficiency virus antigens, Nef, Rev, mutant derivatives of Tat, Tat- Δ 31-45, Pol, T cell epitopes of gp120, and B cell epitopes of gp120, chimeric derivatives of HIV-1-CD4, chimeric Env-CD4, chimeric gp120-CD4, hepatitis B surface antigen, rotavirus antigens, influenza virus antigens, and herpes simplex virus antigens.
17. (Previously presented) The rdsRP according to claim 12, wherein the immunogen is endogenous and is a member selected from the group consisting of cellular proteins, immunoregulatory agents, therapeutic agents, tumor immunogens, autoimmune immunogens and parts thereof.
18. (Previously presented) The rdsRP according to claim 17, wherein the tumor immunogen comprises a member selected from the group consisting of PSA, CEA, MAGE-1 and tyrosinase.

19. (Previously presented) The rdsRP according to claim 10, where the adjuvant comprises a member selected from the group consisting of: A subunit of cholera toxin, bacterial adenosine diphosphate-ribosylating exotoxins, pertussis toxin S1 subunit, adenylate cyclase-hemolysins of *Bordetella pertussis*, and parts thereof.
20. (Previously presented) The rdsRP according to claim 11, wherein the cytokine comprises a member selected from the group consisting of; interleukin-4, IL-5, IL-6, IL-10, IL-12_{p40}, IL-12_{p70}, TGFβ and TNFα.
21. (Previously presented) The rdsRP according to claim 2, wherein the IRES comprises a member selected from the group consisting of: the IRES located at nucleotides 665-1251 in pIRES2-EGFP, IRES from plasmid pCITE4a, IRES from plasmid pSVIRES-N, IRES of the 3'-untranslated region of the mRNA for the beta subunit of mitochondrial H⁺-ATP synthase, (Accession #: Y11034), (Accession #: AF171227), (Accession #: Y07702), (Accession #: AJ000156) and (Accession #: D88622);
22. (Previously presented) A composition comprising the rdsRP according to claim 4.
23. (Previously presented) The composition according to claim 22, further comprising an alpha virus expression cassette.
24. (Previously presented) The composition according to claim 22, wherein the passenger gene encodes for an immunogen.
25. (Previously presented) The composition according to claim 22, wherein the dsRP is Phi-6, Phi-8, or Phi-13.
26. (Previously presented) The composition according to claim 22, wherein the rdsRP is amplified in a bacterial host strain.
27. (Previously presented) The composition according to claim 22, wherein the rdsRP further encodes for an adjuvant as a second passenger gene.

28. (Previously presented) The composition according to claim 22, wherein the rdsRP further encodes for a cytokine.

29. (Previously presented) The composition according to claim 22, wherein the immunogen is foreign or endogenous.

30. (Previously presented) The composition according to claim 29, wherein the immunogen is foreign and is a member selected from the group consisting of viral proteins, bacterial proteins, parasite proteins, cytokines, chemokines, immunoregulatory agents, and therapeutic agents.

31.-39 (Cancelled)

40. (Previously presented) A method of vaccination, comprising administering to a subject the rdsRP according to claim 4 in an amount to express an effective amount of an encoded passenger gene.

41. (Previously presented) The method according to claim 40, wherein the dsRP is administered by intravenous, intramuscular, intradermal, intraperitoneally, intranasal or oral inoculation.

42. (Previously presented) The method according to claim 40, wherein the dsRP is administered with a non-pathogenic or attenuated bacterial vaccine vector.

43. - 61. (Cancelled)

62. (Previously presented) A method of inducing an immune response or biological activity comprising administering to a subject the rdsRP according to claim 4 in a sufficient amount to express an effective amount of encoded passenger gene.

63. (Previously presented) The method according to claim 62, wherein the rdsRP is delivered to mammalian cells or tissues via a bacterial vector.

64. - 78. (Cancelled)

79. (Previously presented) A live bacteria comprising at least one dsRP according to claim 4.

80. (Cancelled)